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ABSTRACT

Fifteen institutionalized profoundly retarded Ss, median age 7 years, who received no intervention training program, were assessed on the Balthazar Scales of Adaptive Behavior (BSAB), Sections I and II to determine whether social coping behavior would improve spontaneous maturation during a 6-month period. The Ss were recommended by nursing personnel on the basis of greatest self destructive behavior, degree of emotional disturbance, and severity of behavioral problems. The Ss were evaluated at 3-month intervals through 12 10-minute observation sessions on the Scales of Social Adaptation (BSAB-II) and Scales of Functional Independence (BSAB-I). Data were developed for unadaptive self-directed behaviors (such as failure to respond and stereotype), unadaptive interpersonal behaviors (agression, withdrawal), adaptive interpersonal behaviors (such as non-communicative social behaviors), play activities (inappropriate and appropriate use of objects and playful contact), and response to instructions. Information was obtained on medications which the Ss were receiving at time of evaluation. Results indicated that passive and informal programing in residential settings with reliance upon tender loving care and acceptance to achieve goals such as emotional wellbeing and behavioral development did not increase change in the Ss's social coping behavior, and that the hypothesis of improvement as a result of spontaneous maturation was not supported (through a longer time period might have some effect on gains). Discontinuance of drug use for four subject resulted in no increase in unadaptive behaviors, indicating need for further investigation into actual effects of drugs on behavior. (MC)

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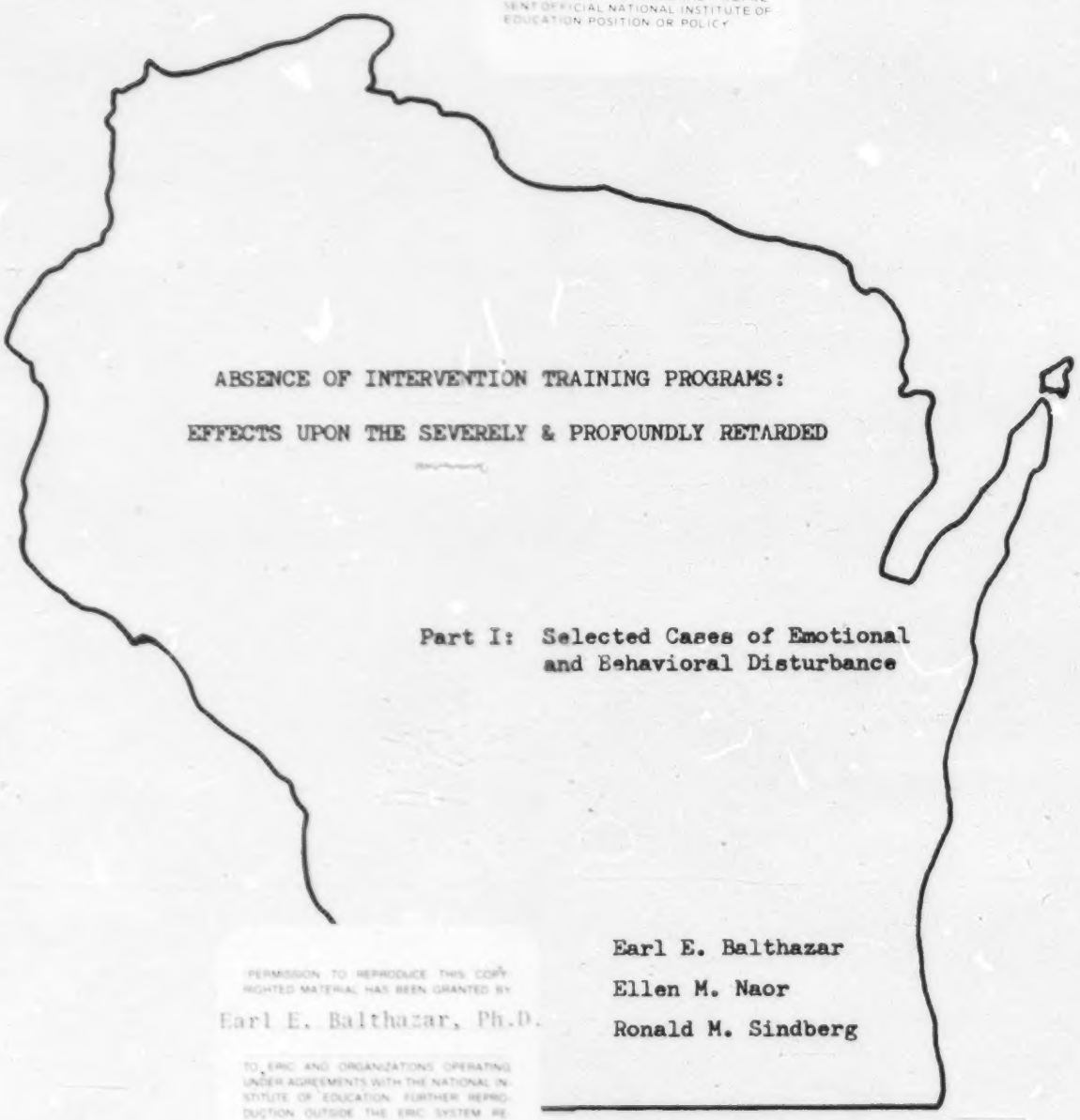

ABSENCE OF INTERVENTION TRAINING PROGRAMS:

EFFECTS UPON THE SEVERELY & PROFOUNDLY RETARDED

Part I: Selected Cases of Emotional and Behavioral Disturbance

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FOREWORD

This publication is the first in a two-part monograph series dealing with the behavior of severely and profoundly retarded, institutionalized individuals. It is an exploration into the kinds of changes, if any, which may take place in the socially adaptive behaviors of such individuals over a period of time in the absence of intervention training programs. In such situations, time and maturation are the major determinants of any behavioral variation. Passive residential programming, consisting of informal, unsophisticated, and randomized stimulation, would seem to be of secondary importance.

In the two parts of the series, two distinct types of residential subjects are considered; these resided in different institutions. The subjects described in Part I: Selected Cases of Emotional and Behavioral Disturbance were among the most severe behavioral management problems, suffering from acute emotional and behavioral disturbances. The subjects in Part II: Selected Cases with Minimal Behavioral Disturbance, on the other hand, were a group of more pliable and manageable individuals with no outstanding behavioral problems.

Similar findings among these two different groups of subjects substantiate and extend the conclusion that only negligible behavioral variation occurs in the absence of direct training programs.

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ABSENCE OF INTERVENTION TRAINING PROGRAMS: EFFECTS UPON THE SEVERELY AND PROFOUNDLY RETARDED

Part I: Selected Cases of Emotional and Behavioral Disturbance

Introduction

In recent years, wider knowledge of the conditions in which many severely and profoundly retarded individuals pass their lives has engendered activity on many levels to alleviate these conditions. There has been much improvement both in the physical care of the retarded and in their medical treatment. The development of new therapeutic techniques has benefited retardates as much as those of normal intelligence. Efforts are being made to erase the stigma associated with mental retardation, to increase the acceptance of retarded persons in the community and to humanize the residential environment of those who are institutionalized.

However, particularly in a residential setting, even ideal conditions in terms of milieu therapy, such as a great deal of Tender Loving Care (TLC), may be ineffective in achieving concrete improvements in the adaptive behaviors of the retarded. This, in fact, may be the essential question. As Balthazar (1972) has pointed out, passive residential programming is an implicit denial of the retardate's ability to learn and to adapt and may even increase his emotional frustration and conflict with his environment. Rather, systematic training programs aimed at specific behavior goals,

using accepted principles of learning, can help the more severely retarded and disturbed to improve their skills in functional independence and in social coping behaviors.

To date, however, there is little concrete information available on the behavior changes, if any, of more severely retarded, emotionally disturbed institutionalized individuals in the absence of specific treatment and training programs. Our present study is concerned with this problem. Without such information, evaluation of the efficacy of any specific program or treatment is unsure and gives rise to a number of questions. Perhaps the changes associated with the program would have occurred anyway? Perhaps some type of spontaneous maturation would take place without external direction? Only when such questions can be answered in the negative is there justification for concluding that behavioral changes associated with a specific program are indeed consequences of it. Quantitative data on the behavior of institutionalized severely and profoundly retarded individuals in the absence of direct learning or training experiences can facilitate a realistic appraisal of the impact of specific programs.

Program Assessment: Models have been established for the objective evaluation and development of treatment and training programs (Balthazar, 1971a, 1971b, 1972, 1973a, 1973b). The essence of the paradigm is the sequence of operations to be followed in establishing the results of a program: orientation or pre-baseline studies,

measured baseline observations, program intervention, and retest measurements. The interpolated program may be, in fact, "no program," in which case application of the paradigm will provide an objective assessment of the basic variation inherent in the subject's behavior over a period of time.

A key aspect of this model is the use of a measuring instrument capable of furnishing an objective and quantitative assessment of program outcome. The Balthazar Scales of Adaptive Behavior, Sections I and II (Balthazar, 1973a, 1973b) were designed for use in this context. The scales evaluate behavioral changes in the lower ranges of mental retardation, including eating-drinking, dressing-undressing, toileting skills (BSAB-I), and socially adaptive behaviors (BSAB-II). The scales can also be used, as here, to measure spontaneous changes in behavior over time under those negative conditions when no concrete program is offered.

Material: This report furnishes quantitative data, then, on changes in the socially adaptive behaviors of institutionalized individuals in the absence of specific intervention programs. The material was collected as part of a study of an experimental nursing program; the initial findings, which are published elsewhere (Balthazar, English, & Sindberg, 1971), describe only a subgroup of the study subjects. The study was concerned with developing programs for the most severely emotionally and/or behaviorally disturbed residents in the institution.

The basic paradigm for program planning and development was followed, using the BSAB-II to evaluate the social coping behaviors of the subjects. The design included both control and experimental groups. The latter were transferred to a special experimental unit where ad hoc treatment and training programs were introduced to modify very specific sorts of behaviors, while the control subjects remained on their home wards and received routine medical-nursing treatment only.

At the time of this study, the institution concerned was expanding rapidly. Patients were being received as quickly as the new residential buildings were made available. Most of the new patients were transfer cases from other institutions which were not equipped to handle the more severely retarded and disturbed individuals. Residential programs at that time were in the early stages of development. In fact, any systematic or formal behavioral programs would have been difficult to implement. It is surmised that intermittent stimulation was provided by the ward personnel to some extent, but on a random, non-directed basis. There was little provision for the specific, systematic, external stimulation necessary for the development of adaptive behavior. Although the institution's nursing care staff emphasized the provision of TLC, opportunity for ward or professional personnel to develop consistent interpersonal relationships with the residents was minimal. Such circumstances, albeit temporary in this institution, are in fact not unusual, particularly in public institutions for the retarded (Balthazar, 1972). In this situation, with no established

behavioral programs on the general wards, any changes in the socially adaptive behaviors of the control subjects can be attributed for the most part to the effects of elapsing time or maturation within a random, unsystematic environment.

Importance of "Control" Data: Information on a group of severely and profoundly retarded "control" subjects, who are not included in any intervention programming, has value in addition to its immediate uses. An authentic control group is interesting in itself if it can be shown that maturation and/or incidental learning have little or no effect upon it. Such data may serve as a reference point for many types of program studies on similar subjects, especially in those instances when a control group cannot be included in the study design. This may occur when suitable subjects are already involved in some type of programming, so that there are none readily available to serve as "no program" controls. The removal of a group of subjects from program participation in order to create a control group is often considered unacceptable on ethical and humanitarian grounds. In general, obtaining an adequate control group can be difficult. The non-introduction of the experimental variable (e.g., a specific program) in itself is not the only criterion for judging the appropriateness of a control group. True controls should otherwise be representative of the target group in all possible respects.

Information from a particular control group has definite value in interpreting program studies on other subjects when standardized

objective measuring instruments are used to facilitate the precise description of the findings. Standardized objective data are also desirable for adequate classification of the subjects in order to judge the comparability of one study to another.

Subjects

The study from which these data are taken was conducted during the years 1968-1970 at a middle-western public institution for the mentally retarded.[1] Subjects were selected from among those recommended by nursing personnel on the basis of their self-destructive behavior, difficulties in general nursing care, degree of emotional disturbance, and severe behavior problems. Only children 12 years old or under were considered. These were among the most difficult and unmanageable of the residents then in the institution. Twenty-eight children were finally selected for inclusion in the program. Cases involving severe physical disability, visual impairment or frequent convulsions were excluded.

Initially, a random sample consisting of 12 subjects was chosen for transfer to the experimental unit for intensive nursing care. The remaining 16 subjects remained on their home wards as control subjects receiving routine medical-nursing care only. These are the subjects on whom this analysis is based. In subsequent stages of the project,

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[1] The investigation was supported by Grant NU 00281 from the U. S. Department of Health, Education, and Welfare, Public Health Service.

experimental subjects whose behavior had sufficiently changed were returned to their home wards, and their places were filled by members of the original control group. The data reported here comprise only the first phase of the project, during which the assignment to experimental or home ward remained unchanged for 15 of the original control subjects. The age and sex distribution of these subjects is given in Table 1.

TABLE 1: CONTROL SUBJECTS BY AGE AND SEX

Age (Years)	Total	Males	Females
Total	15	11	4
3	1	1	--
4	1	--	1
5	3	2	1
6	2	1	1
7	1	1	--
8	4	4	--
9	2	2	--
10	1	--	1
11	--	--	--
Median Age	7.0	7.6	5.5

Method

All subjects were evaluated at regular three-month intervals during the course of the project by rater technicians who were not part of the regular ward personnel. The social coping behaviors of the subjects were measured using an early version of the Balthazar

Scales of Adaptive Behavior, Section II: The Scales of Social Adaptation (BSAB-II) (Balthazar, 1973b). For this analysis, the data were recast into the format of the BSAB-II. Functional skills were also measured, using an earlier version of Section I: The Scales of Functional Independence (BSAB-I) (Balthazar, 1973a).[2]

The BSAB-II provides measures of such social behavioral categories as unadaptive self-directed and interpersonal behaviors, adaptive self-directed and interpersonal behaviors, verbal communication, play activities, and response to instructions. Each of the nineteen separate scales in the BSAB-II consists of a number of subscale items designed to provide information on specific and discrete social behaviors.[3] The scale and subscale items are listed in the Appendix. The BSAB-II was designed and standardized for ambulant severely and profoundly mentally retarded individuals; it is based on direct observation. A count is obtained of the number of times each specific subscale item occurs during the observation session. In this study, 12 ten-minute observation sessions were used and the scores were cumulated over all sessions. The reliabilities of both the BSAB-II and its early version are good, with the proportion of agreement between two raters in the initial stages of training being 70% or higher for almost all subscale items (Balthazar, 1973b). A

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[2] An earlier version of these scales (BSAB-I and BSAB-II) was formerly known as the Central Wisconsin Colony Scales of Adaptive Behavior.

[3] It should be noted that the scores on some scales, in particular "Failure to Respond," "Response to Instructions," and "Response to Firm Instructions," are quite dependent on extrinsic factors such as the provision of adequate stimulus. Score changes on these scales may thus be as much a function of environmental factors as of the subject himself.

description of the early version of the BSAB-II is found in the publications on the studies leading to the development of the BSAB-II (Balthazar & English, 1969a, 1969b, 1969c).

Information was obtained on medications which the subjects were receiving at the times of the evaluations. The administration of anticonvulsants, sedatives, and tranquilizers was noted, in particular. Approximately half of the subjects received one or more such medications at the time of the baseline evaluation. These are listed in Table 2.

TABLE 2: MEDICATIONS[a] RECORDED AT BASELINE EVALUATION

Medication	Subjects
Total	15
No Medication	7
Tranquilizers:	
Proketazine	4
Sedative/Anticonvulsant:	
Phenobarbital	6
Anticonvulsants:	
Dilantin	2
Mysoline	2
Tridione	1
Other:	
Valium	2

[a] Only medications which affect behavior are included.

The methods most suitable for statistical analysis of data derived from the BSAB-II are non-parametric techniques. Since the BSAB-II scales are highly correlated, a multivariate extension[4] of the Friedman two-way analysis of variance by ranks was used, ranking after alignment[5] (Puri & Sen, 1971). The significance levels were estimated by sampling the permutation distribution.[6]

Results

Social scale scores for the initial baseline evaluations and the first two retest evaluations were compared for the 15 control subjects who remained on their home wards for the first six months of the project. The median scores and the score ranges are given in Table 3.[7]

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[4] With multivariate methods, several variables are treated simultaneously, whereas with univariate methods, each variable is considered independently. When variables are correlated, treating them in univariate fashion may introduce bias. Multivariate methods are, therefore, preferable with correlated variables, providing the necessary techniques are available.

[5] Using means for alignment.

[6] The advice of Dr. Jerome Klotz, of the Department of Statistics, University of Wisconsin, Madison, and the efforts of William Davis, M.A., of that Department, in developing appropriate applications of the multivariate methodology are gratefully acknowledged.

[7] No subjects scored on the following scales, which are therefore excluded from the analysis: "Non-functional, repetitious, or inarticulate verbalization," "Verbalization," "Play activities," and "Cooperative contact." These are the more complex behaviors, and it was not expected that the young subjects in this study would demonstrate them.

TABLE 3: MEDIAN BASELINE AND RETEST SCORES

Scale	Median Score (Range) Baseline	Retest 1	Retest 2
Unadaptive Self-Directed Behaviors:			
Failure to Respond	3.0 (0-29)	4.0 (0-48)	7.5 (0-22)
Stereotypy	47.0 (0-133)	65.0 (5-99)	54.0 (0-90)
Non-Directed Verbalization	2.0 (0-7)	1.0 (0-13)	1.0 (0-12)
Inappropriate Contact	0 (0-9)	0 (0-2)	0 (0-8)
Unadaptive Interpersonal Behaviors:			
Aggression, Withdrawal	0 (0-3)	0 (0-7)	1.0 (0-7)
Adaptive Interpersonal Behaviors:			
Non-Communicative Social Behaviors	5.0 (0-51)	6.0 (0-28)	7.0 (1-25)
Social Vocalization and Gestures	2.0 (0-42)	2.0 (0-14)	2.4 (0-32)
Appropriate Response to Negative Peer Contact	0 (0-8)	0 (0-4)	0 (0-8)
Play Activities:			
Inappropriate Use of Objects	10.0 (0-69)	9.0 (0-112)	14.0 (0-67)
Appropriate Use of Objects	0 (0-49)	0 (0-6)	0 (0-7)
Playful Contact	0 (0-3)	0 (0-3)	0 (0-8)

Table 3: Median Baseline and Retest Scores (continued)

Scale	Median Score (Range) Baseline	Retest 1	Retest 2
Response to Instructions:			
Response to Instructions	0 (0-1)	0 (0-2)	0 (0-4)
No Response to Instructions	0 (0-1)	0 (0-5)	0 (0-2)
Response to Firm Instructions	1.0 (0-3)	0 (0-2)	0 (0-14)
Resists Physical Guidance	0 (0-2)	0 (0-2)	0 (0-4)

Considering all scales together, the multivariate comparison indicated that there were no statistically significant differences ($\alpha = .05$) among the three evaluations. That is, the differences in median scores for baseline and retests found on some scales are within the range of the chance variation which would be expected for three observations on each of 15 scales for 15 subjects.

Four of the 15 subjects were females. The median scores for males and females generally were not significantly different at $\alpha = .05$[8] (Figure 1), so the analysis of both sexes together seems justified.

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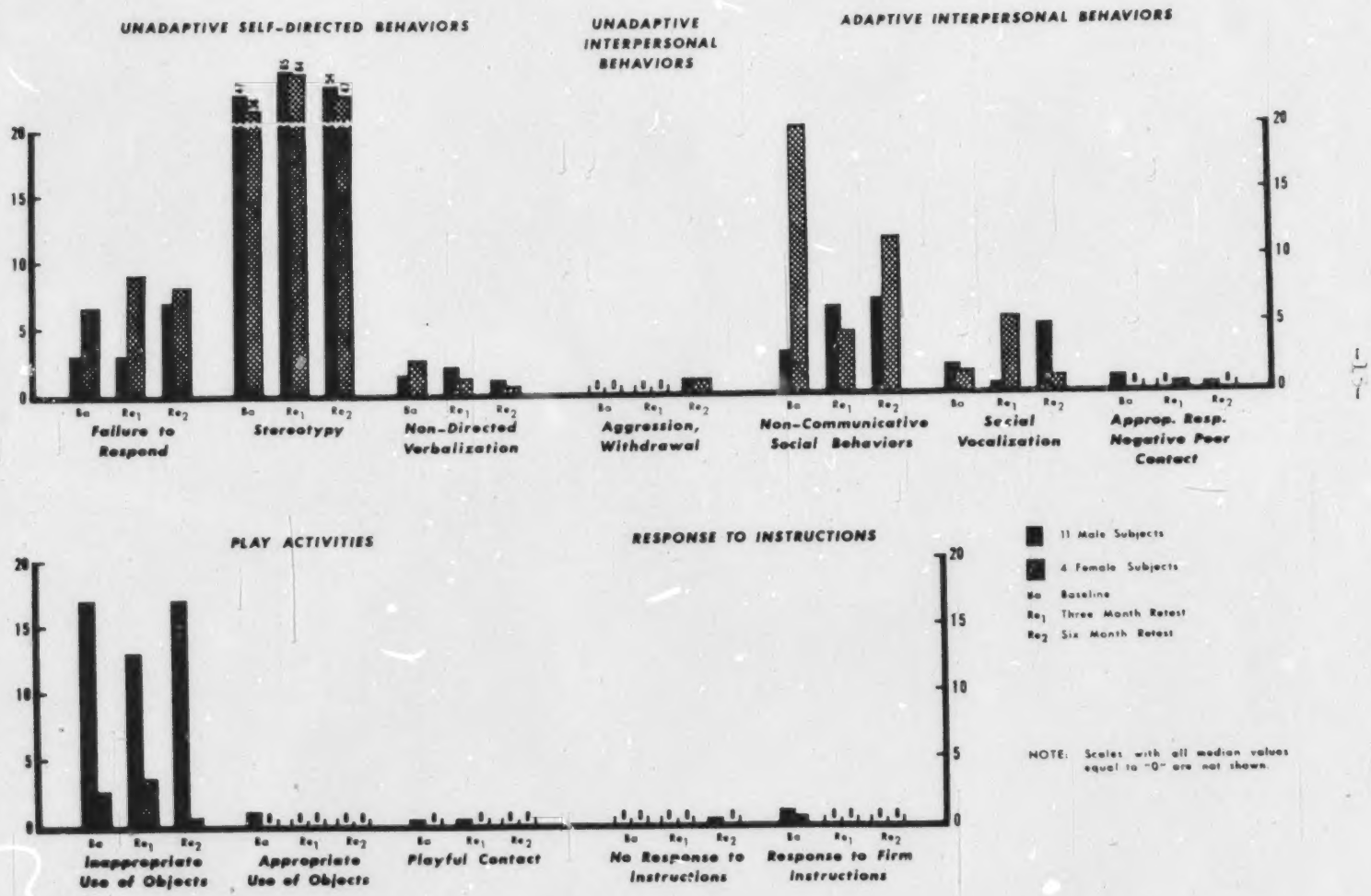
[8] Wilcoxon two-sample test.

Figure 1

BSAB-II MEDIAN BASELINE AND TWO RETEST SCORES FOR CONTROL SUBJECTS, BY SEX

(Intensive Care Program, 1968)



In any case, the small number of female subjects precludes statistically reliable analyses for each sex separately.

Changes in the administration of medication during the study period are shown in Table 4.

TABLE 4: MEDICATIONS RECORDED AT BASELINE & RETEST EVALUATIONS[a]

Subject[b]	Proketazine			Phenobarbital			Anticonvulsants[c]			Valium		
	Ba	Re_1	Re_2	Ba	Re_1	Re_2	Ba	Re_1	Re_2	Ba	Re_1	Re_2
1	X	X	X	X	X	X	X	X				
2				X	X	X				X	X	X
3				X	X	X	X	X	X	X		
4	X											
5	X	X	X				X	X	X			
6				X	X	X	X	X	X			
7				X	X	X	X	X	X			
8	X			X	X	X						

[a] Ba - Baseline; Re_1 - Retest 1; Re_2 - Retest 2.

[b] No such medications were recorded at any evaluation for seven subjects.

[c] Dilantin, Mysoline, Tridione

Drugs were discontinued for four of the subjects. Since three of the discontinued drugs are those supposed to have a tranquilizing effect, the fact that there were no increases in unadaptive behaviors is surprising. These findings suggest the need for further investigation into the actual effects of such drugs on the behavior (measured objectively) of these subjects, i.e., of severely and profoundly retarded, emotionally disturbed individuals.

Discussion

The subjects described in this investigation did not participate in any type of intervention training programs during the interval studied. Time and maturational factors are therefore the major determinants of variation in the subject's behavior during this period. The data reported here indicate that during six months of observation, changes in the social coping behaviors of these severely retarded and disturbed individuals are negligible. There is no evidence for a "time effect" occurring within the duration of the study. These findings provide a quantitative confirmation of the view that passive and informal programming in residential settings, with reliance upon TLC and acceptance to achieve such ambitious goals as emotional well-being and behavioral development, appears to be inadequate in this regard.

Adherents of a theory of spontaneous maturation may note that the study period under investigation is of only six-months duration.

It is perhaps too short an interval to expect evidence of maturation, especially in such severely retarded and disturbed individuals. However, we would stress then the need for long-term studies to substantiate the existence of spontaneous maturation, occurring in the absence of any concrete learning experiences. As mentioned at the beginning of this report, subjects for such studies are difficult to locate. Until evidence from such subjects is forthcoming, it would seem most reasonable to accept the indications of short-term studies such as this, suggesting that behavioral maturation does not occur spontaneously. There is a growing body of evidence that various types of direct intervention training programs are effective in producing behavior changes (Watson, 1967). Some recent examples of such programs are given by Martin, McDonald, & Omichinski (1971); Treffry, Martin, Samels, & Watson (1970); Azrin & Armstrong (1973); Naor & Balthazar (1973a, 1973b); among others.

The results of this study again emphasize the necessity for a holistic evaluation of the individual in terms of organic, behavioral, and environmental factors, with specific training objectives which are consistent with participation in various interpersonal activities. Formal training appears to be the dominant factor in the development of adaptive behavior, providing it is consistent with the underlying maturational status, or developmental readiness of the individual (Balthazar & Stevens, 1973).

Program Development: To repeat, the material presented here indicates that, in the absence of intervention training programs, there is little variation in the social behaviors of severely and profoundly retarded, emotionally disturbed individuals. The question which follows, of course, is—what now? How are adequate programs to be developed? This point has been touched on in the introductory section of this report, and we return to it here. The paradigm outlined by Balthazar (1971a, 1971b, 1972, 1973a, 1973b) for systematic program planning, evaluation, and development provides a model which lends itself well to routine use without sacrificing scientific standards. Examples of the application of this model in the systematic development of a program for improving self-help skills are given by Naor & Balthazar (1973a) and Balthazar, English, & Nelson (1970). Another example by Naor & Balthazar (1973b) utilizes the paradigm to assess the effects of a self-help training program upon socially adaptive behaviors. Earlier material from the study reported here illustrates the utility of this model in evaluating programs for social coping behaviors (Balthazar, English, & Sindberg, 1971).

We have stressed the need for systematically planned, goal-oriented training programs; the BSAB-I and BSAB-II are uniquely useful in facilitating the appropriate selection of specific behaviors using the subscale items as goals or "targets." The complete behavior profiles which can be obtained using these scales permit specific identification of low points in adjustment. The administrative manuals for the BSAB-I and II include helpful discussions in this regard.

An ultimate objective of the Balthazar paradigm is the classification and storage of effective programs in a central location for retrieval as needed. The availability of such practical information regarding program development would be particularly useful for institutions with limited professional staffs. With standardized, proven programs readily available centrally, programming costs in general would also be reduced. These considerations are taken up more fully in earlier publications by Balthazar, particularly 1971b, and by Balthazar & Stevens (1974).

Previous studies (Nelson, Boyd, & Werner, 1970; Naor & Balthazar, 1973a) clearly indicate that the feedback provided by structured program evaluation affects the motivation and performance of both professionals and direct care staff. The concrete demonstration that changes do not occur in passive "programs" can itself act as feedback to provide reinforcement for personnel engaged in intervention training programs. Feedback based on the actual programs being undertaken gains in impact when compared with the negligible changes which are shown to be associated with passive programming. When positive reinforcement is not provided, morale may be affected negatively among professional and direct care staff.

Conclusion: In summary, then, we emphasize the lack of evidence in the data reported here for spontaneous maturation in the behavioral development of severely and profoundly retarded subjects. Likewise, passive programming, with reliance mainly on TLC, is ineffective in achieving

improvements in the socially adaptive behaviors of such individuals. It is clear that the future lies in developing concrete, objectively designed programs encompassing specific behavioral goals.

APPENDIX

SCALES OF THE BSAB-II[9, 10]

UNADAPTIVE SELF-DIRECTED BEHAVIORS

Scale 1: Failure to Respond

a) No response to ward staff
b) No response to negative or inappropriate peer contact
c) No response to positive or appropriate peer contact
d) No response to communication

Scale 2: Stereotypy (Stereopathy), Posturing, Including Objects

a) Multiple, non-functional isolated behavior
b) Physical repetition
c) Self-induced emesis
d) Posturing
e) Vocal play
f) Object stereotypy
g) Self-mutilation

Scale 3: Non-Directed, Repetitious Verbalization; Smiling, Laughing Behaviors

a) Non-directed verbalization
b) Verbal repetition
c) Isolated smiling, laughing behavior

Scale 4: Inappropriate Self-Directed Behavior

a) Inappropriate self-directed behavior
b) Genital play, masturbation

Scale 5: Disorderly, Non-Social Behaviors

a) Spontaneous, disturbed behavior
b) Frustration reaction
c) Destructive behavior

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[9] The earlier version of the BSAB-II used in the study reported here did not include Scales 4, 5, and 8.

[10] These scales are copyrighted by Consulting Psychologists Press, Palo Alto, California, 1973. For administration, definition, and scoring of these scales refer to Balthazar, E. E. The Balthazar Scales of Adaptive Behavior, II. The Scales of Social Adaptation. Published by Consulting Psychologists Press, Inc., 577 College Avenue, Palo Alto, California, 94305.

UNADAPTIVE INTERPERSONAL BEHAVIORS

Scale 6: Inappropriate Contact with Others

a) Responds inappropriately
b) Initiates inappropriate contact

Scale 7: Aggression, Withdrawal

a) Responds aggressively
b) Initiates aggression
c) Vocal or verbal aggression
d) Withdraws from approach

ADAPTIVE SELF-DIRECTED BEHAVIORS

Scale 8: Generalized, Exploratory, Recreational Activity

a) Inactive
b) Generalized activity
c) Exploratory, searching activity
d) Recreational activity
e) Self-regard

ADAPTIVE INTERPERSONAL BEHAVIORS

Scale 9: Fundamental Social Behaviors: Non-Communication

a) Approaches
b) Responds physically
c) Initiates physical contact

Scale 10: Fundamental Social Behaviors: Social Vocalization and Gestures

a) Responds with social vocalization
b) Initiates social vocalization
c) Responds with gestural communication
d) Initiates gestural communication
e) Responds with expressive communication
f) Initiates expressive communication

Scale 11: Appropriate Response to Negative Peer Contact

a) Responds with communication
b) Responds with non-aggressive defense
c) Responds with defensive aggression

VERBAL COMMUNICATION

Scale 12: Non-Functional, Repetitious, or Inarticulate Verbalization

a) Responds with non-functional verbalization
b) Initiates non-functional or repetitious verbalization
c) Responds with inarticulate verbalization
d) Initiates inarticulate verbalization
e) Responds with repetitious verbalization

Scale 13: Verbalization

a) Responds with single word verbalization
b) Initiates single word verbalization
c) Responds with combined verbalization
d) Initiates combined verbalization
e) Responds with integrated verbalization
f) Initiates integrated verbalization
g) Continuous conversation

PLAY ACTIVITIES

Scale 14: Object Relations

a) Carries/holds objects
b) Manipulates objects inappropriately
c) Uses objects appropriately
d) Creative use of objects

Scale 15: Playful Contact

a) Responds playfully
b) Initiates playful contact

Scale 16: Play Activities

a) Responds appropriately to play
b) Initiates play
c) Continuous play

RESPONSE TO INSTRUCTIONS

Scale 17: Response to Instructions

a) Responds to general group instructions
b) Responds to simple instructions
c) Responds to complex instructions
d) Non-compliance

Scale 18: Response to Firmly Given Instructions

a) Responds to firmly given instructions
b) Resists physical guidance
c) Responds to physical guidance

Scale 19: Cooperative Contact

a) Responds with cooperative contact
b) Initiates cooperative contact
c) Responds to task assignment by direction
d) Initiates task assignment

References

Azrin, N. H., & Armstrong, P. M. The "mini-meal"—a method for teaching eating skills to the profoundly retarded. Mental Retardation, 1973, 11 (1), 9-13.

Balthazar, E. E. The assessment of adaptive behavior. In D. A. Primrose (Ed.), Proceedings of the Second Congress of the International Association for the Scientific Study of Mental Deficiency. Warsaw: Polish Medical Publishers (Swets & Zeitlinger N.V., The Netherlands, Distributors), 1971. Pp. 566-570. (a)

Balthazar, E. E. Is measurement of adaptive behavior helpful for programming? In James M. Gardner (Ed.), Mental retardation 1970: Selected papers from the 94th Annual Meeting of the American Association on Mental Deficiency. Volume 1: Theoretical papers. Orient, Ohio: Orient State Institute, Department of Research and Development, 1971. (b)

Balthazar, E. E. Residential programs in adaptive behavior for the emotionally disturbed more severely retarded. Mental Retardation, 1972, 10 (3), 10-13.

Balthazar, E. E. The Balthazar scales of adaptive behavior. Section I: The scales of functional independence (BSAB-I). Consists of:

Part 1: Handbook for the Professional Supervisor

Part 2: Handbook for the Rater Technician

Part 3: Program Scoring Form

Part 4: Workshop and Training Manual

Palo Alto, California: Consulting Psychologists Press, Inc., 1973. (a)

Balthazar, E. E. The Balthazar scales of adaptive behavior. Section II: The scales of social adaptation (BSAB-II). Palo Alto, California: Consulting Psychologists Press, Inc., 1973. (b)

Balthazar, E. E., & English, G. E. A system for classifying the social behaviors of the severely retarded. Madison: Central Wisconsin Colony and Training School Research Department, September, 1969. (Monogr. Suppl. 4). (a)

Balthazar, E. E., & English, G. E. A factorial study of unstructured ward behaviors. American Journal of Mental Deficiency, 1969, 74 (3), 353-360. (b)

Balthazar, E. E., & English, G. E. A system for the social classification of the more severely mentally retarded. American Journal of Mental Deficiency, 1969, 74 (3), 361-368. (c)

Balthazar, E. E., English, G. E., & Nelson, A. C. Behavioral changes in eating skills in severely and profoundly mentally retarded groups. Madison: Central Wisconsin Colony and Training School Research Department, April, 1970. (Monogr. Suppl. 7).

Balthazar, E. E., & Stevens, H. A. Programs for the developmentally disabled, 1973. In preparation.

Balthazar, E. E., & Stevens, H. A. The emotionally disturbed mentally retarded: A historical and contemporary perspective. With annotated reference lists and a bibliography. Englewood Cliffs, New Jersey: Prentice-Hall, 1974. In press.

Martin, G. L., McDonald, S., & Omichinski, M. An operant analysis of response interactions during meals with severely retarded girls. American Journal of Mental Deficiency, 1971, 76 (1), 68-75.

Naor, E. M., & Balthazar, E. E. The program planning paradigm: Application to the area of functional independence. Mental Retardation, 1973, 11 (1), 22-26. (a)

Naor, E. M., & Balthazar, E. E. The effects of a self-help training program upon social coping behaviors, 1973. In preparation. (b)

Nelson, A. C., Boyd, J. D., & Werner, L. W. Final project report: Hospital Improvement Grant, 1 R20 MRO 2111-1. Chippewa Falls: Northern Wisconsin Colony and Training School, 1970.

Puri, M. L., & Sen, P. K. Nonparametric methods in multivariate analysis. New York: John Wiley & Sons, Inc., 1971.

Treffry, D., Martin, G., Samels, J., & Watson, C. Operant conditioning of grooming behavior of severely retarded girls. Mental Retardation, 1970, 8 (4), 29-33.

Watson, L. S. Application of operant conditioning techniques to institutionalized severely and profoundly retarded children. Mental Retardation Abstracts, 1967, 4 (1), 1-18.

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